

ABSTRACT

A batch process and apparatus for producing a pressurized liquid carbon dioxide stream includes distilling a feed stream of carbon dioxide vapor off of a liquid carbon dioxide supply; introducing the carbon dioxide vapor feed stream into
5 at least one purifying filter; condensing the purified feed stream within a condenser to form an intermediate liquid carbon dioxide stream; introducing the intermediate liquid carbon dioxide stream into at least one high-pressure accumulation chamber; heating the high pressure accumulation chamber to pressurize the liquid carbon
10 dioxide contained therein to a delivery pressure; delivering a pressurized liquid carbon dioxide stream from the high-pressure accumulation chamber; and, discontinuing delivery of the pressurized liquid carbon dioxide stream for replenishing the high pressure accumulation chamber.